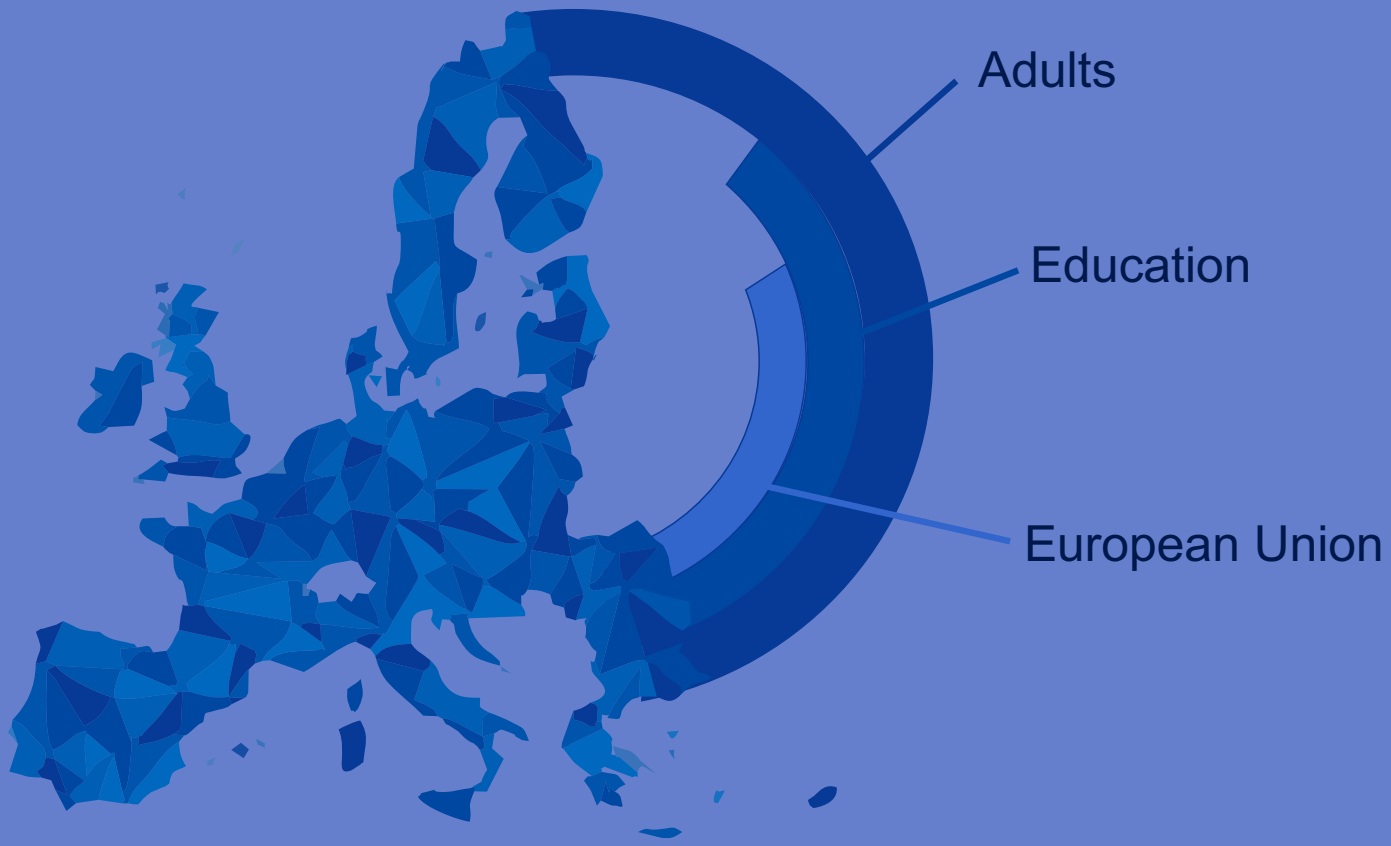
The project "VIRTUAL INCLUSIVE EDUCATION FOR ADULT PEOPLE: VOLUNTEERS AND REFUGEES"



GUIDE FOR ADAPTING ADULTS EDUCATION TO THE COMMON EUROPEAN FRAMEWORK

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2. INTRODUCTION

This Guide for the adaptation of adult education to the common European framework, created within the project "VIRTUAL INCLUSIVE EDUCATION FOR ADULT PEOPLE: VOLUNTEERS AND REFUGEES" focuses on two reference documents for adult education in Europe created by the European Commission: "An in-depth analysis of adult learning policies and their effectiveness in Europe" (European Commission, Directorate General for Employment, Social Affairs and Inclusion) and "Adult Learners in Digital Learning Environments" (EAC-2013-0563) (European Commission, Directorate General for Employment, Social Affairs and Inclusion C5 - Vocational training and adult education).

The project "VIRTUAL INCLUSIVE EDUCATION FOR ADULTS: VOLUNTEERS AND REFUGEES" has been developed with two main objectives:

On the one hand, promoting adult education through the work with migrants, since volunteering can be the activity that encourages adults to improve their education. A practical educational process has been created with the collaboration between social organizations that work specifically on these issues and educational centers for adults. This process brings together the development of basic language and digital skills, a degree or certificate, and an education combining virtual training and social services to increase your self-esteem, personal motivation, leadership, and social commitment.

On the other hand, promoting the integration of refugees, offering them the tools for their integration through an e-learning platform adapted and designed according to their specific needs and in their native languages by social organizations with experience in this field.

The project has generated a system of collaboration with an exchange of experiences between migrants, native adults, and educational and social organizations to promote citizenship, solidarity, and integration. It includes a highly innovative virtual training method with courses, materials, and ICTs distributed in three levels: BASIC SKILLS-INCLUSION-EMPLOYABILITY.

Thus, an intelligent virtual and telematic learning system has been created, capable of defining the user's profile (previous knowledge, languages, strengths and weaknesses in their education…) and creating personalized learning paths that will allow adult persons to carry out social volunteering to develop their skills (both basic and specific) and certify their learning. The system also includes educational modules to improve

the inclusion of migrants and refugees through the development of their basic skills -reading, writing, math, and digital skills-.

To this end, an SMART EDUCATIONAL E-LEARNING PLATFORM FOR INCLUSION has been created, capable of defining the specific needs of adults to adapt the educational pathways through synchronous and asynchronous virtual learning, also in person and mixed training that users can track.

This high quality intellectual output proposes a complete educational service with a great impact on:

- EUROPEAN ADULTS, who will find new motivations to study and receive basic and specific education useful for their community and people in need.

- MIGRANTS AND REFUGEES, who will find a virtual space where they can receive specific and certified training, and where they will meet people and organizations willing to help them in their social inclusion.

-SOCIAL ORGANIZATIONS, which will find a specific training system for new volunteers and an efficient way to connect future volunteers. In addition, they will find resources and tools to create international networks, and educational materials for adult education.

-ACADEMIES AND ADULT EDUCATIONAL CENTERS, will find a system for the internationalization of their educational offer, and a new intersectorial methodology.

This is why, in this guide "GUIDE FOR ADAPTING ADULT EDUCATION TO THE COMMON EUROPEAN FRAMEWORK" you will find the main conclusions drawn from the analysis, reports, legislation, and documents published by the European Commission on Adult Education, as well as identifying the necessary skills for each profile, providing a description and indicators of the necessary skills, knowledge, and abilities with illustrative examples. This has been taken as a reference for the design of the intellectual output of the project.

In this way, this guide is divided into the following sections:

2.1 Analysis of adult learning policies and their effectiveness in Europe

Analyzing adult education in Europe, regarding the most relevant aspects of this sector, such as the benefits it has for both the students themselves but also for companies and the community, the challenges faced by adult education in Europe,

and the evaluation and monitoring of adult education policies to ensure that they are effective and meet their objectives, etc.

2.2 Adult Learners in Digital Learning Environments

This section is especially relevant for this Erasmus Plus project: "VIRTUAL INCLUSIVE EDUCATION FOR ADULT PEOPLE: VOLUNTEERS AND REFUGEES", since it is based on learning in digital environments for adult students, specifically the e-learning platform created to constitute the main intellectual output of the project: the O1- "SMART EDUCATIONAL E-LEARNING PLATFORM FOR INCLUSION".

That is why this part of the Guide compares adult education from different countries based on their level of use or integration of ICTs, separating between clusters of future-oriented (Sweden, Netherlands, Estonia, UK, Norway, Brazil, and the USA), tentative (Spain, Germany, France, and Portugal), or traditional (Czech Republic, Hungary, Greece, Poland, and Turkey) countries, as well as their main characteristics and conclusions of this study.

In addition, the different types of ICTs used in e-learning are analyzed, such as the different software, Harwares and applications that can be used, as well as their main advantages, as well as the possibilities of networking and virtual collaboration, etc.

2.3 Abilities and competences for each profile of adult student

This third part of the "GUIDE FOR ADAPTING ADULT EDUCATION TO THE COMMON EUROPEAN FRAMEWORK" focuses on analyzing the different types of adult education according to the skills and competences that are developed in each of them. It is essential that adult education is adapted to context, needs, and is flexible and adaptable, which is why there is a great diversity of types of adult training: programs to develop basic competences that can be linked to programs for the basic education system, specific programs for basic competences such as linguistic and numerical literacy, for the improvement of ICT skills, or other programs that contribute to the improvement of basic competences, like preparatory programs, adult liberal education, or family literacy.

The possibilities of an adult student to achieve recognized qualifications are also analyzed in this guide in the sections: "opportunities to complete a mid-level qualification during adulthood" and "opportunities to access higher education", in addition to a statistical analysis of obtaining these degrees.

3. ANALYSIS OF ADULT LEARNING POLICIES AND THEIR EFFECTIVENESS IN EUROPE

Adult learning policies, like any other policies, need to be effective: they need to reach their objectives and attain the desired impacts, which should be carefully defined.

Understanding the performance of policies allows policy makers to change and improve them. A growing body of research and statistics provides important insights into how better to achieve policy goals.

The study aimed to identify those factors that help to achieve effective adult learning policy.

Key findings:

1. A systemic review of the latest evidence confirms the significant benefits that adult learning brings to individuals, companies and society;
2. However, the statistical evidence shows that these benefits are not accessible to a very large number of adults who do not undertake any learning;
3. The study found that policies to ensure access to learning are often not in place or not sufficient to make a systemic impact;
4. The study has identified a number of policy actions that are proven to be effective in increasing adult participation in learning;
5. At the same time, Member States lack sufficient policy monitoring systems to ensure that the policy actions that are implemented achieve their intended impact;

The study thus proposes an analytical framework: a template that can assist policymakers in analyzing their adult learning policies.

The study concludes that adult learning policy could be made significantly more effective through a more systematic collection of data, and a more rigorous approach to evaluation to enable Member States 'policy actions to be monitored against their objectives.

3.1 The benefits of adult learning

The study, through a systematic review of recent research evidence, has summarized the benefits of adult learning for learners themselves, for employers and for the wider community.

The benefits for learners are:

- Economic: increased wages, higher incomes and improved employability;
- Wellbeing: improved general wellbeing and health; and
- Social: improved engagement in community and civic activity.

The benefits for employers are:

- Companies 'innovation performance can be increased;
- Higher motivation of the workforce can be attained; and
- Increased productivity and profitability can be achieved.

The benefits for the community are:

- Economic: greater economic competitiveness and higher GDP; and
- Social: positive effects on health, the environment and reduced reoffending.

3.2 Challenges in the field of Adult learning in Europe

Despite these potential benefits, the EU is far from attaining its benchmark of 15% adult participation in learning by 2020. Indeed, there are major challenges to be confronted. At European level, challenges are:

- Significantly increasing rates of adult participation in learning, especially for economically inactive, unemployed, older and less skilled adults;
- Reducing the proportions of adults with poor literacy and numeracy;
- Substantially reducing the number of adults who have only a lower secondary qualification.

At Member State level:

- Few countries have in place all the policy actions that constitute the "building blocks for successful adult learning policies";
- Every country faces challenges in improving equity of access and many face challenges in several other areas; and
- Coordinating adult learning policy actions at national and sub-national levels can be improved.

Ensuring equitable access to education and training, and improving adults 'basic skills are thus the critical weaknesses of current adult learning policies in EU Member States.

3.3 Which policies are effective?

In considering how to address these challenges, policy makers should note that:

- Participation in learning is strongly linked to the availability of government funded learning opportunities, and the amount of government investment in learning;
- Focusing investment on underrepresented groups not only reduces inequalities in accessing learning, but also increases overall adult participation in learning;
- Provision of employment- and work-related training is a key driver in increasing the overall rate of adult participation in learning; and
- Improving learners' disposition to learning increases participation in learning.

The study identified six key factors for successful adult learning policies that could significantly increase adult participation in learning and the positive benefits that flow from it:

3.3.1 Increasing learners' disposition towards learning

Building a positive disposition towards learning among individual learners is important in promoting participation and retention in learning. The evidence suggests that this is not motivated by direct financial incentives to adults but is facilitated by structural features of the adult learning system, such as guidance for learners, involving social partners in the adult learning system and raising awareness of the benefits of learning.

3.3.2 Increasing employers' investment in learning

Employers play an important role in promoting a learning culture and promoting participation in learning. They should be considered an important partner in the delivery and design of adult learning. The research evidence highlights employers' investment in learning as important for increasing the availability of learning opportunities as well as for increasing participation, especially among their workforce. As work-related motivations are among the main reasons for adults to take up learning, job-related training is particularly effective in attracting learners.

3.3.3 Improving equity of access to learning for everyone

Engaging hard-to-reach groups in learning and overcoming barriers to their participation is challenging. Support for people in disadvantaged groups is important in assisting them to participate in learning. This includes funding learning opportunities for disadvantaged adults, ensuring that guidance support is tailored to individual learners' needs and motivations, recognition of non-formal and

informal learning (NFIL) and embedding basic skills development in learning programmes for low-skilled people (who are also likely to be members of disadvantaged groups). Intermediary organisations such as community groups and trade unions can play a role in engaging harder to reach adults in learning.

3.3.4 Delivering learning that is relevant to employers and learners

The needs of learners and employers are important factors in the decision to undertake or provide learning, especially if learning is job-related. Designing learning opportunities to respond to learners' needs makes the prospect of participation in learning more attractive. The research evidence confirms that where learning takes account of the needs and motivations of both employers and learners, it is likely to be more effective in improving outcomes for both, and in increasing participation in learning.

3.3.5 Deliver high quality adult learning

While there has been little evaluation of systems and tools designed to assure the quality of adult learning, there is broad agreement among practitioners that delivery of high quality adult learning is important in ensuring positive outcomes for learners, employers and the community. This is reflected in the number of recent reports that have mapped and compared quality assurance systems in adult education and training in different Member States. However, this research has not systematically assessed the effectiveness of such policy actions; thus, evidence about their effectiveness is less robust.

Nevertheless, the policy literature suggests that ensuring quality in adult learning should be considered an important priority, especially in the context of increased accountability for public investment and ET2020 objectives.

3.3.6 Co-ordinate an effective lifelong learning policy

There is a clear need to co-ordinate lifelong learning policy effectively to deliver the desired outcomes for learners, employers and the community. The research evidence, the policy literature and the case studies all suggest that collaboration and coordination of adult learning policies are important factors in their successful implementation at national or subnational level. A lifelong learning strategy on its own is not enough to increase participation, but it is enabled by co-ordination and collaboration between different institutions and stakeholders. In addition, the policy literature suggests that collection of data and evidence to monitor policy is crucial in ensuring its effectiveness.

3.4 Monitoring and evaluating adult learning policies

Countries currently collect only a limited range of data for monitoring adult learning. Adhoc research to monitor policy actions is also patchy. The case studies show that while some countries have data systems which can be used for monitoring policy actions, others are in the making and some appear only to make use of project data.

The case studies suggest that by no means all countries routinely set targets for policy actions so that they can monitor whether they have achieved improvements in adults' participation in learning or in their competences. A small number of countries have set targets in their national strategies or plans the attainment of which can be monitored either through information collected from adult learning providers or from surveys of learners. As a consequence, it is often difficult to assess if policy actions are making a difference or if they are efficient.

Equally, the case studies show that governments are not commonly commissioning evaluations of policy actions so that they are able to provide evidence of the outcomes and impacts they are expecting to achieve from adult learning. Where evaluations are carried out, they tend to focus on shorter term outcomes such as gains in knowledge and confidence which are more often assessed qualitatively by participants, rather than by testing participants before and after their learning, or from learning outcomes gained from achieving accredited qualifications.

Without the measurement of medium and long term outcomes from adult learning, it is not then possible to estimate returns on investment, which would allow outcomes to be valued and compared with the costs of the policy action. The existing evidence is generally characterised by methodologically weak evaluation design (to measure impacts) and lacking objective measures to assess outcomes as measures of success.

3.5 Using European data sources to improve policy monitoring and evaluation

The study has explored to what extent European data sources could be used to improve the quality and coverage of monitoring adult learning policies in Europe. The assessment of the data sources available at the European level found that:

- There is a broad range of statistical data available for monitoring most adult learning policies at the macro-level, and in general they cover all Member States;

- Some sources provide sufficient data to permit annual monitoring of key elements of adult learning;
- Still, all policy actions are not equally well covered by existing data sources; and
- Data required to assess the performance and quality of adult learning policy interventions is seldom available.

Overall, there exist sufficient statistical data that can be used to improve the monitoring of most adult learning policies.

To assist policymakers, the study has devised an "analytical framework" that can be used as a template to guide the design, analysis, evaluation and monitoring of adult learning policies, at regional, national and international levels. An online tool is being developed to assist policymakers in using this analytical framework.

The analytical framework developed by this study provides a firm basis for any Member State wishing to put in place or improve a system for monitoring its adult learning policies.

3.6 Recommendations

The study recommends actions that could be taken by Member States, the European Commission and other stakeholders. In particular to make use of the analytical framework it has developed in designing adult learning policies and provision, and in monitoring policy effectiveness. National authorities should make sure that their policies take into account the six key factors for successful adult learning, in particular by improving equity of adult access to learning, and ascertain the extent to which the necessary types of policy action are in place. Better coordination of adult learning and other economic and social policies at national, regional and local levels is also recommended in order to ensure coherent provision and thereby ensure the best outcomes from policy interventions.

Source: "An in-depth analysis of adult learning policies and their effectiveness in Europe" July 2015 (European Commission, Directorate General for Employment, Social Affairs and Inclusion) (Europe 2020: Employment Policies).

4. ADULT LEARNERS IN DIGITAL LEARNING ENVIRONMENTS

A detailed comparative analysis was undertaken of evidence gathered on the state-ofplay and take-up of OER among adult learners across a range of countries. Countries were selected through an analysis of statistics from Eurostat (Adult Education Survey, Internet statistics, Labour Force Survey) and OECD (PIACC - Programme for the International Assessment of Adult Competences), relating to levels of adult learning, the adoption of ICT-enhanced learning among adults, levels of ICT skills in adults, and participation in lifelong learning (LLL). The selection identified countries across a range of adult learning using ICTs and OER, from countries with advanced practice to those experiencing significant challenges in developing adult learning.

Subsequent country level investigation involved an online survey and country-specific research. The online survey gathered information on how providers of adult learning used ICTs and OERs in their provision. The country research involved approximately 100 in-depth interviews with policy makers and adult education providers. Three clusters of countries were identified.

The analysis of the results identified that countries in a future-oriented cluster (Sweden, Netherlands, Estonia, UK, Norway, Brazil, and the USA) are characterised by four elements that drive the successful implementation of ICT in adult learning:

- They have an integrated strategy for lifelong learning and ICT;
- Public and private actors collaborate with cities and local providers of adult education;
- They display innovative ICT approaches; and
- They actively address barriers that prevent the development of ICT-enhanced adult education.

Countries in a tentative cluster (Spain, Germany, France, and Portugal) are characterised by four elements:

- Strategies for lifelong learning do not fully integrate the use of digital technologies;
- Strong markets for adult education exist, but there is not a coordinating body for ICT-enhanced adult learning projects;
- A strong role for universities in ICT-enhanced learning; and
- Barriers, such as the insufficient access to digital networks and low ICT skills, prevent the wider development of ICT-enhanced adult education.

Countries in a traditional cluster (Czech Republic, Hungary, Greece, Poland, and Turkey) are characterised by four elements:

- The absence of lifelong learning strategies that integrate the use of digital technologies;
- Uncoordinated actions by Ministries, and no coordinating body for ICT-enhanced adult learning projects;
- A strong role for universities in ICT-enhanced learning; and
- Significant barriers preventing use of ICTs in adult learning.

4.1 Benefits of ICT and OER in Adult Learning

An analysis of policy documents and the research literature confirmed that benefits of ICT and OER in adult learning are widely acknowledged amongst policymakers and practitioners. ICTs and OER can be used to:

- Extend and diversify the provision of learning;
- Enable provision to be tailored in terms of content (by making learning available in smaller units), and time and place (by disconnecting learning from traditional learning settings); and
- Widen access, building on conventional distance learning techniques and providing new forms of non-traditional learning.
- However, there are wide variations in the diffusion of hardware and software and content, the spread of their usage across the adult learning community, and their effect on the development of teaching and learning. Overall:
- First-generation ICT tools still dominate;
- Widespread and major effects on teaching and learning are still awaited;
- There are particularly strong challenges for OER development and take-up;
- Full potential for enhancement, engagement and wider access is still to be realised;
- A 'digital divide' exists amongst adult learning institutions; and
- Informal learning provision is under-developed. Adult Learning Providers The findings of the study have informed the conclusions and recommendations, and helped to shape the proposed online self-assessment toolkit which will be hosted on the EPALE (Electronic Platform for Adult Learning in Europe) platform, enabling AL providers to:
- Self-assess their practice; and
- Explore good practice in making effective use of ICT and OER in adult learning.

4.2 ICT-enhanced learning and OER - Potential and Conditions for Success

This chapter looks at the types of ICT and OER available and their potential to overcome barriers in adult learning. It then looks at how European tools and processes are being developed to ensure that the learning outcomes can be recognised. For example, both the recognition of prior learning - as adults undertake flexible learning journeys across many learning resources - and how the results of their learning can be recognised by employers. The chapter ends with a summary of the key conditions for the successful development and use of ICT and OER, and identifies the major challenges. That then informed the structuring of the country-level research for this study.

It should be noted that much of the literature related to the use of ICT in education relates to schools and higher education. These contexts differ from adult learning in several ways. Resourcing levels are typically higher, and in higher education, university autonomy and the high degree of education of learners provide a highly different set of circumstances to those found in adult learning.

4.2.1 Types of ICT used in adult learning

New ICT and applications appear rapidly, so within any study such as this it is not appropriate to stipulate a definitive set of ICT since a list would be outdated before the study is published. Rather than focus on which basic applications are available (e.g. social networks, visualisations, communication platforms) the important issue is how they can be used to develop new and more appropriate learning environments for the highly diverse community of adult learners.

Work by Goertz (Goertz 2013; UFI 2012) indicates the extent to which new technologies have the potential to contribute in particular to collaborative learning and less formal ways of learning. Collaborative forms of learning are based on the sharing of experiences between educator and learner. Adults, with their more extensive life knowledge and experiences, arguably stand to benefit significantly from such types of learning.

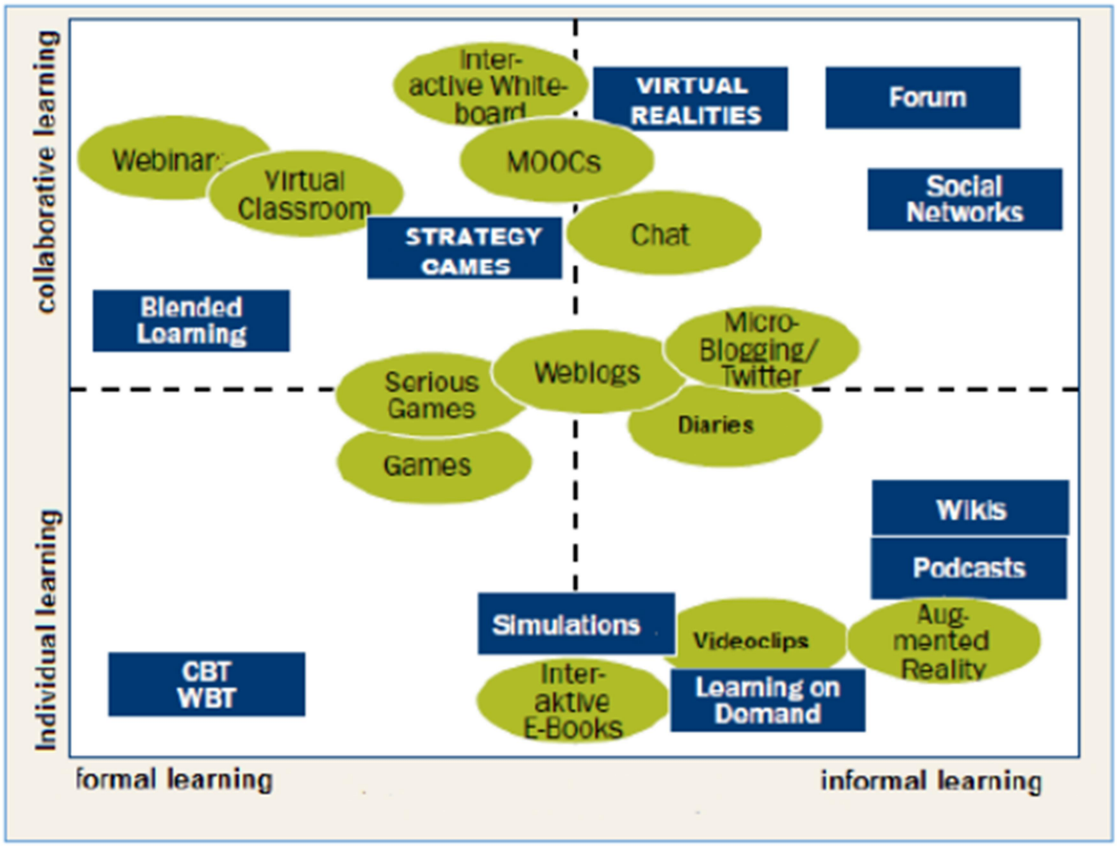


Figure: different types of ICT-tools and their potential for learning (Blue areas indicate types of ICT that were already available in 2008). Source (Goertz 2013, p.11).

Figure shows that there are a large number of different types of ICT that can be used in learning which need to be examined. Categorising these forms of ICT is difficult. The old distinction between hardware and software has largely collapsed, and technologies have converged. The next sections look at the main types of devices and applications available using some of these categories.

Hardware

To date laptops and desktop computers have been the mainstay of ICT provision in adult learning organisations. In that context they have the advantage of uniformity, where all learners use the same technologies, which then reduces the ICT training needs for educators, and the support overheads for learning providers. They are also highly versatile since they can contribute to learning in a wide range of settings from individual work to whole class teaching, and can also be used for. But they are typically fixed in their location, desktops are mobile only within the walls of

institutions. This potentially reduces their attractiveness as part of a package to attract back into education learners with low educational attainment who may have had negative experiences in initial education.

Smartphones, tablets and other mobile devices constitute the 'next wave' in hardware and have significant computing power. They are mobile and very accesible channels through which learning applications (Apps) can be accessed, often free-ofcharge.

They have particular potential for informal and non-formal learning, for example covering language learning, literacy, numeracy. Because of their flexibility, ease of use and familiarity, these devices are often seen as having great potential for learners from disadvantaged communities. Indeed, mobile devices can be used as 'bring your own devices' (BYOD) within learning environments, for example avoiding learning providers having to provide devices to learners.

However, there are additional ICT support overheads (providing advice across many types of devices), not all BYOD devices will have suitable security software installed by the learners (Thomas 2013), and there is a potential for a lack of inclusiveness where some learners are not able to BYOD. There are also issues for adults who cannot afford mobile phone contracts that have 'unlimited' 3G or 4G Internet access (speeds that are often required for effective interaction with Apps). Where adults have pay-asyou- go contracts the costs of Internet usage can be prohibitive (ITU 2014).

Interactive Digital Television (ITU 2011) enables on-demand access to programmes and learning resources. Content can be accessed when learners are available, and they can skip bits of programmes/content. Interactivity is posible through surveys/polls, responses to questions, and gaming. IDTV does not have the sophistication of tablets and computers, or the portability of smartphones.

Visual and audio devices, sensors, scanners and apps. In the past these tended to be separate devices such as digital cameras, printers, scanners, fax machines etc.

Increasingly such devices are present within smartphones, either through embedded hardware (high definition camera, microphone, audio speakers etc.), Smartphone functions (one-touch keys to send a photo as an email attachment) or Apps (such as instant image sharing apps, messaging, and text scanning). Learners can then capture and share information at any time, so building collaborative learning resources in realtime.

The process can impose new demands on the educators in managing a continuous flow of information coming from learners (Webb 2013). Recent innovations like Smart-glasses, Smartwatches and other 'intelligent' and 'wearable' technologies have the ability to gather personal data in contexts such as health education (ECONOMIST 2015).

In line with the thinking that there should be "equal opportunity for persons with disability in the different environments of the information society" (Toboso 2011) assistive technology (AT) devices have been developed. These include picture communication boards, tactile symbols, different keyboards (e.g. large keys for visual impairments, or designed for those with one hand), pointing systems (e.g. sip-andpuff systems for paraplegics), touch screens. In such cases the adults may be fully able, and skilled, to engage with learning resources, but need to overcome physical impairments.

Other AT devices include braille printers, refreshable braille displays (representing screen text), speech to text, or text to speech (for those with visual impairments). However, while software currently is sophisticated at turning text into speech, it is yet to be developed so that it can interpret visual images such as maps and graphs (text still has to be pre-prepared for images). At other levels there can be pointing devices controlled by eye movements, or even signals from nerves and brain.

The research literature shows that there remains a strong need for educators and other learning support for persons with severe disabilities (Seale 2014), and for supporters to have specialist training (Ryan 2011). However, it is also clear that persons with disabilities are early adopters of new technologies "seeing the potential benefits of these technologies within their lives" (Ellis 2011), and are initiators of learning innovation (Kornowski 2012). The EU Digital Agenda has provided strong leadership in developing an inclusive technology landscape by supporting the development of high-tech assistive technologies (Sigafoos 2011).

Finally, an essential hardware pre-requisite for realising the full potential of ICT is fast broadband internet access (FBIA) (but this is not specific to adult learning). FBIA overcomes the friction of distance by providing virtual connectivity with learning resources across the World Wide Web. The EU Digital Agenda is focused on the goal of "Every home, every business should have fast, reliable broadband services".

Overcoming distance enables significantly more learners to access resources, or can connect groups of learners who are geographically distributed and who could not realistically attend place-based learning as a group. This can reduce the cost per

learner, especially where learning has scalability and can meet the needs of large groups of learners. But availability, especially in rural areas, is not yet universal.

Software and applications

In general, as digital technologies have been developing, users have been able to move from using offline software packages to online applications and resources. However, offline channels (e.g. PC-based applications) remain important where access to suitable broadband is either not yet provided by Internet Service Providers (e.g. remote rural areas), not available (e.g. too expensive to buy for home use), or forbidden or heavily regulated (e.g. in a prison).

A rapidly developing area has been games and simulations which have grown at a dramatic rate outside education. Not surprisingly their potential for learning has also begun to be exploited. For example, 'serious games' focus on real-world simulations of techniques (for example mechanics), processes (such as health30), or events (for example earthquakes and other disasters31). Scenario-based learning – which was already in use prior to digital technologies through board games - involves learners actively working through a problem that is complex or not fully structured. It requires them to use their knowledge of the subject involved, to apply critical thinking and to solve real-world problems. The learning can be phased over stages where at each milestone learners need to reflect and report on what has happened. The learning can be individual or group-based, for example, managing patients in hospitals, a medical crisis simulator, or customer relations training.

Augmented reality applications involve views of real-world environments which are enhanced (augmented) by computer-generated inputs such as location (using GPS to calculate location), sound, imagery, or sensory input (for example where learners wear headsets). The EU funded the Joyar project through the Grundtvig LLL Programme, for example developing an application for citizens to be involved in urban planning.

Networking and virtual collaboration

Collaboration software (some free of charge) enables educators and students to communicate, chat, manage email lists, share information and documents, share study notes, carry out online assignments, schedule learning sessions (online learning diaries).

Social networking and communication applications like Facebook communities, Google Groups, blogs, podcasts, webinars, wikis and Twitter, allow learners to contribute material and communicate at any time with other learners who have actively 'opted in' to receiving the contributions. Educators can create and participate in online communities of educators, enlarging their learning and teaching network (Bacigalupo and Cachia 2011). Learners can create self-organised learning communities (Lee and Sig 2013).

Teaching and learning management platforms

These platforms used to be large-scale and relatively expensive covering groups of providers, e.g. in the schools sector, or whole universities. But now open-source learning platforms such as Moodle can enable educators to construct interactive learning environments in a much simpler manner and tailored more directly to their needs. Educators can engage with development partners, who may be in their own country and be able to help construct learning environments in the local language – thus reaching out to a wider community of adult learners. Learning platform tools such as online diaries can help coordinate the delivery of learning and the time availability of learners.

Storage and other learning support

The Cloud can provide opportunities for learners, and learning communities, to store and share data, information, and applications on the Cloud, rather than physically on their own devices. Previously expensive software packages such as Microsoft Office are increasingly being made free to use via the Cloud. The EU Digital Agenda is promoting standards, fair contract terms for cloud usage, and its potential to enable superfast broadband for resource-intensive applications such as videoconferencing.

The increasing availability of cloud services has the potential to dramatically reduce the cost of learning design, delivery and administration.

Free-of-charge bibliographic software can provide learners with the tools to effectively store reading resources and cite and reference them properly within assignments.

Online translation software can help to overcome the predominance of English language resources on the Internet. While not professionally robust (for example, commercial software can be specifically targeted to particular professional sectors

such as health), free-of-charge online translation can provide quick overviews of literature. For example, Google Translate was translating between 50 languages in April 2015. Smartphone based Apps to translate speech in real time are also growing in effectiveness.

In addition to the above, there are other ICT-enhanced learning environments that support new types of teaching and learning, and allow teachers and learners to collaborate, network and share resources virtually.

In conventional teaching, class time is mostly used for educators to deliver material to learners, where the same material to all learners at the same pace, at the same time. Learners take the same assignments at the same time.

'Flipped' and virtual learning environments allow teachers and learners to collaborate virtually. These learning environments require online tools to monitor the progress of learners since learners will progress at different speeds, or where learners take parts of a module or course as part of a personal 'learning portfolio'. By separating out the tasks of learning and assessment learners can more easily learn at their own pace, or for many adult learners within their own time constraints). ECTS and the Bologna tools can be used to structure assessment and outcomes so that portfolio learning can lead to recognised qualifications.

'Flipped' learning environments provide core material in advance to learners who then supplement it through personal and group activities (reading, exploring resources, using learning platforms to exchange material, discuss and debate with other learners) (Kampylis, Bocconi, and Punie 2012). The 'classroom' time is then used to discuss work in groups, and for the educator to help the learners to structure and understand the material, meeting their individual needs (Heid, Fischer, and Kugemann 2009).

'Flipped' learning environments are particularly useful where the learning cannot be simply 'automated' and consumed at a distance without significant educator intervention or group work.

4.3 Conclusions

There are 16 overall conclusions from the Study.

For learners:

- A. Basic skills. Literacy, numeracy and ICT skills are fundamental enablers for adult learners. PIAAC 2012 statistics report that about 20% of adults in the EU have low literacy and numeracy skills, and 25% have low ICT skills;
- B. Adult learning can benefit significantly from access to adult learning resources made available using ICT tools (Internet, software, content and devices), and with well-focused learning content; and
- C. Individualisation of learning is beneficial. Digitally delivered learning has the potential to individualise learning.
- For providers and educators:
- D. Educators need digital and pedagogic skills. Adult educators need to be provided with training in the effective use of ICTs and OER, and to be fully involved in the design of programmes;
- E. Benefits of adult learning are not effectively communicated and understood. Communicating the particular benefits of ICT-enabled learning can better motivate adults to learn, and to help adults and businesses understand the rewards and benefits of adult learning;
- F. Learning providers and organisations need appropriate organisational and support structures to enable educators to use ICTs and OER effectively in the development of adult learning;
- G. Learning providers and organisations need better sustainable institutional strategies for the use of ICTs and OER in the development of adult learning; and
- H. Learning providers need more extensive networking, the sharing of good practice and partnerships to create targeted and high-quality ICT-enabled learning content for their adult learners.

For policy initiatives:

- I. ICTs, especially mobile ICTs, can be used to access learning at any time;
- J. Access to ICT infrastructure is not adequately ensured for all learners;
- K. Vulnerable adults need particular support. For example those who have low basic skills, including ICT-skills, low levels of formal qualifications, or are otherwise marginalised;

- L. Raising awareness about the availability of ICT-enabled adult learning resources. Coherent and pan-European information and resources about adult learning can help;
- M. Benefits of flexible and personalised ICT-enabled learning can be enhanced through transparency and recognition tools. Adult learners can be motivated to learn through providing the conditions to validate and recognise learning obtained from multiple online learning resources;
- N. Licensing and copyright conditions can be further developed to open up access to digital education resources (OER) and enable their effective use in adult learning;
- O. Policy can be well-informed by continuing to develop a pan-European evidence base to monitor and analyse developments in ICT-enhanced adult learning; and
- P. There are variations across Member States in the levels of participation in adult learning, and the extent of ICT and OER developments for adult learning. The broad clusters that were identified show a wide range of adult learning developments using ICTs and OER.

Source: "Adult Learners in Digital Learning Environments (EAC-2013-0563) Final Report" (European Commission, Directorate General for Employment, Social Affairs and Inclusion C5 – Vocational training and adult education)

5. ABILITIES AND COMPETENCES FOR EACH PROFILE OF ADULT STUDENT

The educational offer for adults with a lower level of formal education and/or basic competences is described using a series of terms that sometimes have different meanings or overlap, depending on the country. The most frequently used expressions are “literacy”, “basic competences”, “basic adult education”, and “second chance education”, and their equivalents in other languages. Although the meaning of these concepts is clearly defined in certain national contexts, it may not be clear when establishing international comparisons. Therefore, the purpose of this section is to analyze the terminology currently handled and define its use.

Literacy, basic competences, key competences and basic education for adults

The terms “basic competences” and “key competences” are usually handled in European education and training policies, including adult education and training.

However, as Jeantheau points out:

[…] *concepts such as “literacy”, “illiteracy”, “basic competences”, or “key competences” are loaded with meaning. These terms carry the history and culture of each country, but also the ideas of the agents involved and their vision of present and future societies. It is often the context or means of communication which determine their use, rather than their own meaning* (Jeantheau 2005, p.77).

In fact, it is difficult to assign a unique meaning to these terms. They can be understood and conceptualized differently by various international organizations and by different countries, where they are used and interpreted according to their traditions and the particularities of their systems.

While there is no global consensus on the concept of literacy, the word usually refers to the ability to read and write (for example NRDC, 2010a). In 1978, UNESCO recommended a definition according to which a person who has a functional level of literacy “can participate in all activities in which such competence is required to act effectively within their age group and community, and also allow them to continue reading, writing, and calculating for their own progress and that of their community” (UNESCO 2013, p.20). Thus, UNESCO defines literacy as the “ability to identify, understand, interpret, create, communicate, and calculate using printed and written materials, associated to different contexts. Literacy implies a continuum

of learning that allows people to achieve their objectives, develop their knowledge and potential, and participate fully in their community and in society as a whole" (stated during an international meeting of experts held in June 2003, cited in UNESCO 2004, p.13).

International surveys on the competences of adults offer another point of view on the concept of literacy. Compared to UNESCO, the PIAAC survey handles a more limited definition of literacy, which refers exclusively to writing, and defines it as "the ability to understand and use information contained in written texts, in a variety of contexts, to achieve the objectives and develop people's knowledge and potential". Along with the concept of literacy, the survey also refers to the basic numerical competence (the "ability to use, apply, interpret, and communicate information and mathematical concepts") and to solve problems in computerized environments (the "ability to use technology to solve problems and perform complex tasks").

Regarding basic competences, Cedefop (2008, p.37) defines them as "the skills necessary to live in today's society, that is: speaking, listening, reading, writing, and mathematical knowledge". In addition to the basic competences, the same source introduces the notion of "new basic competences" understood as "skills for the use of ICTs, foreign languages, social, organizational and communicative competences, technological and cultural competences, and entrepreneurship (ibid., p.132). The sum of the basic competences and the new basic competences is called "key competences" (ibid., P.101).

According to the previous definitions, the concepts of "literacy", "basic competences" and "key competences" partly overlap. Likewise, these terms are closely linked to the concept of "key competences" defined in the framework of European policy as the following eight capabilities: communication in the mother tongue, communication in foreign languages, mathematical competence, basic competences in science and technology, digital competence, the competence of learning to learn, social and civic competences, sense of initiative and entrepreneurship, and cultural expression and awareness. Two of the key competences -communication in the mother tongue and mathematics- are in fact basic competences when considered at the level required for participation in work and in ordinary social activity (Cedefop 2013, p.20).

Although EU political documents rarely mention "basic adult education", the term is used quite frequently in the academc field. There are several definitions,

differentiated especially by whether or not they include training in the national language for speakers of foreign languages and/or ICT competences. However, it is understood that basic education for adults refers to the educational offer to help adults acquire basic reading, writing and math skills, equivalent to the level of competence that is usually acquired at the end of lower secondary education. This training can also incorporate teaching the language of the country to non-natives or the improvement of ICT skills.

Based on the concepts discussed above, the term "programs on basic competences" will be used in this chapter to refer to any training offer on literacy, basic skills, or basic education for adults, in any modality or combination. Likewise, it will be understood that these programs are aimed at the development of linguistic, numerical and ICT competences (whether or not they include training in other competences).

Second chance education

While the expression "second chance education" appears frequently in publications on postsecondary or adult education, it is difficult to find a single definition of the term, or those currently used are not necessarily interpreted it in the same way.

Inbar and Sever (1989) define second chance education as "a new opportunity to resume or return to an itinerary that has been abandoned or completely lost" (ibid., p.233).

Another definition proposed by Jarvis (2002) focuses on the failure of the initial education system, referencing the training offer for those who did not complete this stage successfully. Titmus (1996, p.13) provides a different angle, pointing out that second chance education "is only an appropriate term in societies with a universal system of initial education. It refers to the offer of opportunities for learning available during initial education for people who have finished it and lost the opportunities offered during that stage". Vellos and Vandeboncoeru (2013) offer a more concrete definition, linking it to compensatory programs to finish upper secondary education:

[…] *second chance education is usually defined according to the type of participant: usually young people who have been excluded from the ordinary education system or have somehow moved away from schools. It is often offered as a way to complete a program or achieve a degree equivalent to secondary education* […] (ibid., P.35).

In contrast to the previous meanings, the European Terminology Study on Adult Education for a common language and the understanding and control of the sector (NRDC, 2010a) defines second chance education as the "[…] *reintegration into training, diferent of access to higher education and the training carried out after completing initial education*" (ibid., p.68). In other words, this definition emphasizes only the differences between second chance education and initial (uninterrupted) and higher education, also considered independent concepts.

It is also important to note that different political agendas may slightly alter the meaning of the concept, highlighting various aspects. Consequently, the purpose of second chance education can be interpreted from a "compensatory" point of view or as a "progression" opportunity.

The "compensatory" perspective is closely linked to European policies to reduce the number of young people who drop out of school prematurely (European Commission, 2011a). In this context, compensatory second chance education refers to the educational offer (especially) for young people who abandoned (for whatever reason) initial education without a high school degree. In other words, "*compensatory measures offer the opportunity to participate in education and training to those who have moved away from the education system.* […] i*ts objective is to help young people to return to general education -or to give them a 'second chance'-*" (ibid.p.7). This concept is related to the fact that dropping out of initial education with little or no qualification and without the minimum recognized levels entails a high risk of social exclusion, more specifically exclusion from stable jobs. Thus, second chance education is an opportunity to neutralize this risk.

The "progression" dimension is more related to the political agenda on higher education, in particular to the measures and policies to extend access to higher education to "non-traditional" candidates. While the term "second chance education" is rarely used explicitly in this context, some preparatory and access programs or bridge courses for adults -lacking a valid official degree to enter higher education- could be considered as second chance, since they provide those who lack the necessary qualifications the opportunity to access higher education in later stages of their life.

Taking into account all of the above, the term second chance education is used in this chapter in cases in which countries specifically include it (for example, in "second chance lower secondary schools" in Greece [Scholeio Defteris Efkairias]) or

when referring to certain compensatory programs to complete upper secondary. However, its use will be restricted to avoid confusion.

5.1 Programs for the development of basic competences

It is not easy to establish comparisons between programs for the improvement of the basic competences of adults at the international level, specifically for linguistic, numerical, and ICT competences. Different types of educational offers can contribute to developing these skills, both the programs designed for this purpose and others that, under different names, incorporate the basic competences into their curricular design. On the other hand, the offer of competences can be developed in various environments, not only in education and training centers, but also in companies or community centers.

	Programas específicos sobre competencias básicas	Programas que incluyen las competencias básicas
Centros de educación y formación	Programas de "alfabetización", "competencias básicas" o "competencias clave" que se imparten en centros educativos	Programas que incorporan las competencias básicas, impartidos en centros educativos (por ejemplo, programas preparatorios de educación postobligatoria que incluyen un repaso a distintas áreas curriculares) Potencialmente, cualquier actividad formativa que se imparte en centros educativos
Entornos ajenos a los centros de educación y formación	Programas de "alfabetización", "competencias básicas" o "competencias clave" que se imparten, por ejemplo, en empresas o en centros comunitarios.	Programas que incorporan las competencias básicas, impartidos, por ejemplo, en empresas o en centros comunitarios Potencialmente, cualquier actividad formativa que se desarrolla fuera de los centros educativos

Graph: offer of basic competences in adult education and training.

When public administrations allocate funds to programs on basic competences, such financing can be channeled to different types of offer, usually due to factors like the educational level of the adult population, the situation of the labor market, or the size and educational profile of the migrant population. Thus, the study of the offer of basic competences focuses on this section as a mosaic in which each of the elements contributes to their development.

The first of the following sections analyzes the programs directly related to the initial education system, specifically those that allow completion of lower secondary level (ISCED 2). The second focuses on specific programs on basic competences -those that include specific elements of linguistic, numerical, and ICT competences-. The third section offers a summary of the educational offer that contributes to the development of basic competences, including preparatory programs that develop the skills needed to access higher studies, vocational training, and those in the framework of active employment policies (AEPs), liberal adult education, and programs at the limit between non-formal and informal learning. The last sections evaluate the effectiveness of literacy programs and basic competences based on the existing results of studies in this field.

The analysis has taken into account the close relationship between the programs linked to the initial education system and those specific to the development of basic competences. For example, some of the former can be structured around subjects, such as specific short-term courses, on the other hand, programs classified as specific on basic competences are directly related to ISCED levels 1 and 2 of the formal education system (for example, the Norwegian program “basic competences for working life” (*basiskompetanse i arbeidslivet*), has been developed taking into account the objectives stipulated in the national primary and secondary education curriculum).

For the comparative analysis, however, each program has been included in a specific category, following an “approximation” approach.

5.1.1 Programs linked to the initial education system

The most obvious starting point when conducting a comparative analysis of the programs of basic competences or basic education for adults in different countries is the training linked to initial education: the programs aimed at helping students complete lower secondary education. In general youth should finish this level between the ages of 14 and 16, depending on the country. Upon completion, students are supposed to have functional competences in various areas, including reading, writing, math, and ICTs. Lower secondary education is mandatory in all European countries, so it is surprising that most of them offer programs for adults directly associated with primary and/or lower secondary education.

However, 6.5% of adults (25-64 years) in Europe -about 20 million people- dropped out of school before successfully completing lower secondary. This percentage

exceeds 10% in Belgium and Cyprus (both around 11%), Malta (11.5%), Spain (14.5%), Iceland (15.6%), Greece (19, 4%), Portugal (38.9%), and Turkey (56.9%). Likewise, although the graph represents the existence of programs, it does not report on their relative weight in the educational system. These issues will be analyzed in detail in other sections.

Among the countries in which the initial education system sepparates between primary and lower secondary education, only a few of them offer programs linked to primary education (Spain, Italy, Lithuania, Poland, Portugal, and Romania). Spain and Portugal divide these programs into different sub-levels or subprograms: in Spain, educational administrations usually sepparate two cycles, each one year long. Portugal also divides into two cycles, each about 800 hours. Statistics show that in 2011/12 approximately 90000 people participated in these programs in Spain, about 35000 in Italy and about 3000 in Romania. In 2012/14 Lithuania and Portugal registered 60 and 77 participants respectively.

Virtually all European countries have programs to complete lower secondary education or the unique-structure, but, as in primary education for adults in Lithuania and Poland, they usually only target a small group of people, because in many countries, almost all adults have completed this level. For example, in the Czech Republic, only 0.2% of adults have not completed lower secondary education, so only about 400 people participated in the corresponding educational offer (*kurz pro získání základního vzdeˇlání*) in 2013/14. If we consider the participation statistics and other parameters -like volume of population- there are only a few countries with initial education programs for adults, up to lower secondary, in which this offer represents a relevant quantitative contribution to the whole of education and the formation. Among countries with a medium or small population size (up to 20million), Sweden has the highest level of participation (about 34000 in 2012), followed by Denmark (7000 in 2013), Romania and Norway (both 6000 in 2011/12 and 2012/13 respectively), Greece (4000 in 2012/13), Hungary, the Netherlands, Austria, and Finland (2000 in between 2011 and 2013), and Slovenia (1000 in 2013/14). In other countries with a population of less than 20 million inhabitants, participation is below 1000 people or there is no follow-up from the central level. Among countries with the highest population (more than 20million) very high figures were recorded in Spain (236000 in 2011/12) and in Turkey (367000 in 2012/13), followed by lower ones from Italy (34000 in 2011/12), Germany (20000 in 2012/13), and Poland (15000 in 2013).

It should also be noted that the people who attend these programs are not necessarily over 18 years old. In fact, in many countries, anyone who has reached the age of completion of compulsory education (between 14 and 16 years old) can sign up -for more information, see European Commission/EACEA/Eurydice, 2014b)- without having completed lower secondary or single-structure. Data provided by Estonia reveals that of 371 people who completed vocational training for adults at the lower secondary level (*põhihariduse nõudeta kutseõpe*) during 2013/14, 148 were under 19, 73 between 20 and 24, and only 150 were over 25 years old. However, in some countries programs linked to initial education through lower secondary education are specifically aimed at adults. This is the case in some Nordic countries, where programs related to single-structure education are specifically aimed at people over 18 ("general education for adults" -*almen voksenuddannelse*- in Denmark) or 20 ("basic education for adults" -*grundläggande vuxenutbildning*- in Sweden). The same happens in Greece with the "second chance schools" (*Scholeio Defteris Efkairias*), and programs to complete lower secondary education in Portugal (*Ciclo do Ensino Basic* -Adult Education and Training Courses- B3), where the minimum sign-up age 18. Spain also belongs to this category, but even 16-year-old students can be admitted in exceptional circumstances.

The way in which these programs are structured partly explains the patterns of participation: while in some countries the offer is organized into integrated programs that carry a large workload, in other cases they are organized based on subjects that can be studied independently in shorter modules.

The first model is the most frequent in most countries. For example, in Portugal there are different itineraries within the lower secondary school for adults (general or professional), equivalent to between 1000 and 2000 teaching hours, depending on whether the student is in a general course or also in a vocational training course. Slovenia reports that the programs to complete the single stage of basic education have an approximate duration of 2000 teaching hours. Countries that fall into this category often formulate the duration of their programs in school courses, and usually refer to periods between one to three years, the exact duration taking into account the individual needs of the student, so there is no specific one. The duration also depends on whether the program is offered full or part time -there are both options in most countries-. Turkey seems to have the most flexible system, which in the case of lower secondary is called "open secondary education"

(*Açık Öğ˘retim Ortaokulu*), without a fixed duration and offered as distance education.

In the second model, programs are organized by subject; students can sign-up for single subjects in shorter courses. This model is the most used in Nordic countries, and offers two alternatives: the student can sign-up for individual subjects in shorter courses without completing lower secondary, or they can combine the subjects in a predetermined way until finishing lower secondary or unique-structure. In Finland, for example, adults can sign-up for single subjects such as languages or ICT, as a "subject student" or they can prepare for exams in different subjects, which allows them to obtain a degree to access upper secondary education. In Denmark, general adult education (*almen voksenuddannelse*) includes courses by subject, which can be completed by means of an exam equivalent to *folkeskole* tests (unitary schools of compulsory education). These courses are usually 60 hours, divided into three difficulty levels. It is also possible to take a general exam to get a certificate in 5 subjects: Danish, mathematics, English, natural sciences, and an option to choose between French, German, history, and social sciences. This exam qualifies students to access the upper preparatory program or the higher preparatory program by subject (upper secondary education) in the corresponding branch of studies.

In Sweden, where the basic education curriculum for adults is also organized by courses, the central administration collects the participation statistics directly related to the offer of literacy and basic competences. Here, of the 34122 participants signed-up for basic adult education in 2012, approximately 25% (8500 adults) signed-up for reading and writing courses. These data may partly explain the relatively high overall participation figures. In fact, the data is very likely to refer to people who signed-up for several short-term courses for single subjects (i.e. "participation statistics") instead of people who took only one course (i.e. "participants").

5.1.2 Specific programs on basic competences

The programs presented in the previous section include elements of literacy, basic skills or key competences, but cannot be framed within the specific offer of basic competences, given that their name fits the main objective they pursue, in most cases completing the Lower secondary education or unique-structure. It has also been said that some countries offer modular initial education programs, which allow students to choose only some curricular components (among basic skills such

as mother tongue, math, or ICT) and complete them as part of short-term "basic competences" courses. Along with this type of offer, some countries have also designed specific programs or frameworks for the development of very diverse basic competences, which makes it difficult to establish comparisons at the international level. Moreover, some countries have introduced a wide range of programs with similar names but very different contents, while others use different terminology for programs with similar content.

Programs on basic competences with elements of linguistic and numerical literacy

In approximately half of European countries there are specific programs on basic linguistic and numerical competences – with or without other contents (ICT, study skills, etc.).

First, several European countries have programs or framework programs, often recently created, called "basic skills", "basic competences", or "key competences". For example, Portugal developed in 2010 the "basic competence training" plan; in Norway the "basic competences for working life" (*Basiskompetanse and arbeidslivet*) is ongoing since 2006, providing training in literacy, mathematics, ICT, and oral communication skills; Austria launched a framework program in 2012 called *Basisbildung* ("basic education") although it is made reference as a program for "basic competences"; in France, the Ministry of Labor opted for a broader content than "basic competences" or "basic skills" by implementing "key competences" (*competences clefs*) in 2009, which deals with the eight competences defined in European politics; the United Kingdom (UK) has created various qualifications on basic competences called Functional Competences (England), Essential Competences Wales (Wales), Essential Competences (Northern Ireland), and Key Competences (Scotland), which have undergone reforms since their introduction 20 years ago, so many differences can be seen between them. These qualifications replaced in 2010 in England and Wales the Key Skills that young students can achieve in schools or high-schools and the Basic Skills for adults.

In some countries there are specific programs or framework programs on linguistic or numerical literacy, as well as functional literacy. For example, in Ireland there is a framework program called "adult literacy" since 1980, which includes courses in reading, writing, basic arithmetic, ICT, learning to learn, and personal development. The French Community of Belgium has also launched a framework program called

alphabétisation "literacy". In the Netherlands, since the mid-1990s, the national network of training centers (ROCs) teaches Dutch and basic arithmetic (*opleidingen Nederlands in rekenen*). In Italy, a legal framework was established in 1997 that allows Permanent Territorial Centers (*Centri territoriali permanenti* -CTPs- adult education centers) to offer functional literacy courses (*corsi brevi and modulari di alfabetizzazione funzionale*), which are currently in the process of extinction and will be replaced by another educational offer. In Luxembourg, the program "basic education for adults" (*instruction de base des adultes*) includes since 1991 courses in linguistic, numerical, and ICT literacy. There is a similar approach in Belgium where, between 1985 and 1990, a network of 13 public "basic adult education centers" was created (*Centra voor Basiseducatie*), which organize courses for the development of different basic competences like Dutch, mathematics, and ICT.

Programs that incorporate basic competences into their core content do not necessarily use specific terms to refer to such basic skills. The most relevant example is in Denmark, where the content of "preparatory education for adults" (*forberedende voksenundervisning*) includes basic competences in reading, writing, and math, although the general objective of the program is to provide students with the necessary skills to advance the education and training system. There are similar preparatory programs in other countries, but with less linguistic and numerical content, or part of broader institutional strategies or frameworks. Slovenia has also created a framework of basic competences that does not refer to them, the "Educational Program for Success in Life" (*Usposabljanje za življenjsko uspešnost*), developed between 2003 and 2006, with modalities for literacy and the development of basic competences in different environments like work, family, and rural communities.

Although on many occasions the specific programs on basic competences are non-formal (in Germany, France, Austria, and Slovenia), some countries include them within their structures and qualification systems. This is the case in the UK, where the Functional Competences (England) and Essential Competences (Wales and Northern Ireland) programs are accredited at three levels of the nine established in the National Qualifications Framework: Initial Level (divided into initial 1, 2, and 3), Level 1 and Level 2. Denmark and the Netherlands also recognize their basic skills programs ("preparatory education for adults" in Denmark, and Dutch courses and numerical proficiency in the Netherlands) in their qualification systems, placing them at the first level of their respective qualification frameworks. Although the "basic skills training" program in Portugal is not recognized within the qualifications

framework, it is included in its National Qualifications Catalog (National Qualification Catalog).

It is also necessary to take into account that specific programs on basic competences may have a more defined identity in some sectors than others. While most countries have developed them within the education sector, France has a different approach: the employment ministry launched the "key competences" program, aimed at unemployed people, within the framework of active employment policies (PAEs). In Norway, the "basic competence for working life" program was developed in the education sector, but its target group is workers, which implies that it is companies -in collaboration with the program provider and with the unions- who propose the training offer and request public assistance.

Public administrations adopt different approaches regarding providers of basic competence programs: they can choose specific suppliers or allow different entities to organize the training offer. The first model exists in Belgium and the Netherlands, where the 13 basic adult education centers of Belgium and the 43 ROCs (regional training centers) from the Netherlands manage the training offer. However, the Netherlands is currently studying a reform that would allow cities to choose between different suppliers to facilitate an offer adapted to the target groups. Other countries follow this model, for example Norway, where the "basic competence for working life" program can be offered in public schools and in a number of non-profit organizations. In Austria, the programs included in "basic competences" are also developed in many institutions, usually large centers with a wide range of adult education. In Slovenia, the different training modalities of the "Educational Program for Success in Life" are normally offered at public adult education centers locally. In Germany, the main providers of literacy courses are adult education centers (*Volkshochschulen*), but can be organized by other entities.

The degree of intervention of administrations when defining the content or levels of the programs on basic competences varies depending on the countries. For example, in the Netherlands, cities enjoy great autonomy when organizing linguistic or numerical literacy courses at regional training centers. There is also a very low intervention by the central administration in Germany, where the supply of literacy is the responsibility of the *Länder* and the local authorities. However, the federal government provides certain guidelines. Specifically, the German Adult Education Association (DVV) -federal level agency- has recently developed a framework that encompasses several areas, including writing, reading, and math. It

offers guidance to teachers of basic skills courses, with examples of exercises for different levels of literacy (the so-called “alpha levels”). Austria also belongs to the group of countries in which the central administration intervenes in a very limited way in the non-formal courses of basic competences. Here, the programs of the “basic competences” framework differ both in content and in their development. However, in order to request assistance, it is necessary for the program to have an official accreditation, which implies that its curriculum has to meet specific requirements, including that of structuring programs on linguistic, numerical and ICT competence at different levels (up to 5). Norway’s approach is similar, but with more specific guidelines for centers. Here, the basic competences courses called “basic competence for working life” must be linked to the competences framework developed specifically for adults by the Norwegian Agency for Lifelong Learning (Vox). Likewise, the objectives established by this framework are also in line with the national curriculum of lower primary and secondary education, determined by the Norwegian Directorate of Education and Training.

Belgium represents a model with a much higher degree of intervention by the central administration. Detailed content and organizational guidelines have been set for the basic competence programs that are taught in the 13 basic education centers (non-profit institutions supported by public funds that offer basic adult education). Detailed standards regarding learning outcomes have also been developed in the UK, where the programs lead to a nationally recognized qualification of Functional Competences (England), Essential Competences Wales (Wales), Essential Competences (Northern Ireland), and Key Competences (Scotland). However, the organization and content of the programs may vary depending on the context and the provider of the offer.

It is important to note that the nature of the programs on basic skills, including their competence framework, can evolve over time. For example, in Luxembourg, where “basic education for adults” exists from the early 1990s, until 2013 the central administration did not formalize this type of educational offer by establishing a framework of competences, described in a simple document that is delivered to all students at the beginning of the program.

As with the content standards, the duration of the basic competence programs varies depending on the countries. In some (Germany, Austria and the Netherlands), providers have enough autonomy when designing courses, including decisions about their duration; in others there are guidelines in this regard. In the 13 adult basic education centers in Belgium, programs usually have a considerable

workload. For example “Dutch” as subject, structured in three programs, consists of some 600 to 1000 teaching hours, depending on the program(s) chosen by the student. Each study program is divided into modules; “math”, which follows the same pattern of organization, includes between 360 and 630 teaching hours.

The programs of basic competences in other countries tend to be shorter, usually between 100 and 300 teaching hours. For example, “basic competences” in France is about 100 teaching hours over 6 months. In Luxembourg, the courses of “Basic Adult Education” usually have between 150 and 300 teaching hours, depending on the needs of the students. In Norway, the ordinary courses of “basic competences for working life” are 130 hours, and 75% of those who requested the programs in 2013 chose them. In Slovenia, the different lines of “Educational Program for Success in Life” last between 75 and 350 teaching hours. Since several countries structure their basic competences programs into modules or small units, the duration of a module can be quite short compared to the complete program. For example, Portugal reports that the offer called “training in basic competences” is configured in at least three modules, each lasting 50 hours. Since it consists of six modules, the total duration of the program ranges between 150 and 300 hours, depending on the number of modules in which the student signs up for. In Denmark, “preparatory education for adults” is structured into several “levels”, each between 30 and 60 hours, after which a test is conducted (for example, reading consists of four levels from 30 to 60 hours and math two, 30 to 60 hours each). The program lasts in total between 120 and 240 hours. To a certain extent, the UK (England, Wales and Northern Ireland) follows a similar pattern. The different qualifications on basic competences, with different names depending on the region, are designed as a coherent itinerary that allows to grow from the Initial Level, subdivided in turn into three levels, to Level 1 and 2 of the National Qualifications Framework (MNC). Along this path, a particular program can have a relatively short duration. For example, the support materials for the centers that offer Functional Competences of English indicate 45 teaching hours for each of the sub-levels of the Initial Level (OCR, n.d.).

To complete this analysis of the programs on basic competences it is necessary to mention the participation statistics. The data point to limited participation rates in general, which can be due to the fact that programs are often aimed at specific groups that are difficult to reach. In most countries, the annual participation does not exceed 5000 students. In those with a very small population (i.e. Luxembourg), only a few participate in these training actions. However, in some places

participation levels are higher. This is the case in Ireland, where "adult literacy" programs had about 57000 participants in 2012, and Denmark's "adult preparatory education" registered 25000 participants in 2013. As an example of participation figures in countries with more population, in France had 50000 members in the "basic competences" program in 2011. Since the program was developed by the Ministry of Employment, more than 90% of the participants were unemployed.

Programs for the enhancement of ICT competences

Cedefop (2008, p.132) refers to ICT competences as "new basic competences". In fact, information and communication technologies have become part of everyday life and it is difficult to thrive today without the skills necessary to use them effectively. The offer of these competences is integrated in the compulsory education curriculum of all European countries, and therefore also in programs for adult lower secondary education level. ICTs have also been incorporated into the specific offer on basic competences analyzed in the previous section.

For example, in Belgium, the courses taught in the 13 basic adult education centers include ICT training; in Luxembourg, basic ICT courses are included in the basic adult education described above; ICT learning is also included in other training education frameworks, including active employment policies (PAEs) and liberal (popular) adult education. In addition to the offer described above, only a few countries have developed specific ICT competence programs outside the general "basic competences" frameworks. For example, in 2005 Slovenia launched a digital literacy program for adults (*raˇcunalniška pismenost za odrasle*) of 60 hours, focused on basic ICT knowledge, such as word processing, Internet use, email, etc.

Both the program and its development regulations have been introduced from the central level by the Adult Education Expert Council, with 1745 people participating in 2012. In 2008, Iceland launched a program called "Stronger Workers: ICT and Communication Competences" (*Sterkari Starfsmaður: Upplýsingatækni og samskipti*) focused on the working population, and specifically on people who wish to improve their use of ICTs. The program is taught by 11 lifeong education centers throughout the country, structured in 150 teaching hours, and grants 12 valid credits to complete upper secondary education; it had 50 people participants in 2013. Poland reports a large-scale initiative of recent implementation, the ESF project "Digital Poland Lighthouse Keepers" (*Latarnicy Polski Cyfrowej*) that offers

digital training to people older than 50. Since the beginning of 2013, about 200000 persons have participated in the project.

5.1.3. Other programs that contribute to the improvement of basic competences

Although the most visible part of the offer on basic competences is made of programs that provide adults with the knowledge and skills associated with initial education until completing upper secondary education and those that specifically address basic competences, their contribution to education of adults is quite limited in most countries, if we take into account the percentage of participants within the adult population as a whole. Thus, to complete this training landscape, it is necessary to analyze another type of public offer aimed adults that want to resume their education: the following sections summarize the wide range of existing programs in this area, such as preparatory programs, vocational training courses (including the educational offer of active employment policies - AEPs), popular and liberal adult education, and programs between non-formal and informal education, specifically family literacy programs.

Preparatory programs

We have already mentioned that programs with elements of basic competences do not always explicitly show it in their name. For example, Denmark launched a program for the development of linguistic and numerical competences described as “preparatory education for adults” (*forberedende voksenundervisning*). These types of preparatory programs also exist in other countries, but they are integrated into the curriculum rather than explicitly mentioning that they include these competences.

The offer is often part of broader institutional strategies or frameworks, which makes identification more difficult. In Sweden, for example, popular institutes -part of the liberal adult education sector- offer a program to help low-skilled unemployed persons to raise their motivation towards study (*studiemotiverande folkhögskolekurs*). This consists of a series of elements, including a review of different areas of the curriculum (the “basic competences”), a reinforcement of study skills, and also educational and professional guidance. Another example focused on the same population group (unemployed with low qualifications) exists in Belgium, where various organizations (i.e. “Bruxelles Formation” in Brussels) offer training for the acquisition of the necessary skills to pursue programs aimed at obtaining an official degree. The third example in this category is Ireland, with

their "basic bridge courses" for long-term unemployed persons who do not have the necessary competences to access certain study programs. These courses include modules like basic computer science, communication skills, and experiences in different professional sectors -i.e. the opportunity for students to try several jobs (for example in the wood, metal, handicraft sector etc.) to help them find the most appropriate career for them. Iceland launched several preparatory programs for people who wish to continue education to complete upper secondary education; this is done throughout the country in a network of 11 lifelong education centers and, although non-formal, they grant between 7 and 24 valid credits to complete an upper secondary education program.

In Spain there are preparatory courses for the access test to middle grade (upper secondary) vocational training for over 16 years. These programs incorporate elements of communication (language and literature), technology, and social competences. Its benchmark is usually the compulsory secondary education curriculum (lower secondary).

Liberal adult education

In many European countries, administrations finance liberal or popular adult education. The name that this sector receives varies depending on the countries, but the offer usually includes a series of non-formal programs that often contribute to the development of different competences. These courses are usually the starting point for progress towards other training or qualifications. Although a study on the training offer in this sector would be necessary, some relevant examples of the current offer have been included in this section.

Liberal adult education is traditionally associated with the Nordic countries - Denmark, Finland, Sweden, and Norway- where it has a long tradition dating back to the 19th century. In Denmark, where this adult education model was created, the system currently includes three types of centers, popular universities (*folkehøjskoler*), night schools (*aftenskoler* - *voksenundervisning*) and popular day universities (*daghøjskoler*). All of them depend on the Ministry of Culture and offer non-formal courses of varying duration.

The system is very decentralized, and not all data is available at the central level on the number of participants. In Sweden there are data on participation; in 2013, 150 popular universities (*folkhögskolor*) and 10 study associations (*studieförbund*) had between 120000 and 914763 students respectively. Although it is a non-formal offer, some courses of Swedish popular universities have a more formal character.

For example, there is a specific course to improve motivation towards study for unemployed persons, which incorporates elements of educational and professional guidance, review of different areas of the curriculum (including basic competences), study techniques, etc. (for more information on the program, see the preparatory programs in previous sections).

Anglo-Saxon countries have a long tradition of liberal/popular adult education, known within the sector as “community education”. England, Wales, and Northern Ireland have various training opportunities, including personal development, cultural enrichment, and intellectual and creative stimulation. This can include programs to obtain an official degree, included in the National Qualifications Framework (NQF) or in the Qualifications and Credits Framework (QCF). Scotland has created a similar system -community education for adults- that includes adult literacy and English for other language speakers (ESOL). Ireland has several courses within the “community education” offer, usually outside formal education. Its objective is to promote learning, autonomy, and participation in civil society. The courses within community education are generally short (10-15 weeks), although some may last up to one year. In 2012, 55000 people signed up for them.

Germany is another example of a highly consolidated sector of liberal adult education, coordinated at local and regional levels. Here, adult education centers (*Volkshochschulen*) offer a wide range of courses, including foreign languages, general education, and cultural courses. These centers are the main providers of adult literacy and basic competences, and they also organize programs to complete lower secondary education, as well as preparatory courses to access this level. Austria has developed a similar offer.

There are more examples of non-formal education in this sector in other European countries. In some of them, European financing plays a fundamental role. For example, in Estonia, between 2008 and 2013 approximately 33000 people benefited from non-formal courses taught under the program “Adult Education in Non-formal Education and Training Centers”, supported by European social funds. Some of these courses are focused on the development of key competences, such as linguistic, digital, and learning to learn. Greece has turned to European funds to develop an institutional network to guarantee the offer of non-formal education, specifically, the network of Lifelong Learning Centers (*Kentra Dia Viou Mathisis*). In 2013, up to 271 cities or towns had created such centers. In Hungary, a European-funded project has been operating since 2010 -“Open Education Centers” (*NYITOK Tanulási központok programjai*)- that offers non-formal learning opportunities to

adults living in lesser developed areas of the country, with lower qualifications or competences.

Family literacy

Family literacy programs, often on the borderline between non-formal and informal education, contribute significantly to the offer of basic competences.

A recent study (Carpetiery et al., 2011) analyzed the advances in this field in different European countries. The study noted that data on the scope of this educational offer is quite limited in most countries. Turkey is an exception, as it has objectives and data on participation related to its flagship initiative on family literacy "Mother-Child Education Program" (MOCEP). According to this study, the program has achieved wide dissemination. Its annual participation objective is 25000 mothers and children, and until 2011 more than 6600 courses have been taught to approximately 300000 mothers and children in 7 provinces of Turkey (ibid). Ireland has also invested in the offer of family literacy and has compiled data about it: these programs account for approximately 7% (about 3500 students in 2008; ibid.) of the total number of students in adult literacy programs. Unfortunately, there is no data available in other European countries from the central level on family literacy programs (ibid.).

The same study reveals that there are only a few national strategies on family literacy or central level policies aimed at developing an integrated or complementary offer. On the contrary, initiatives tend to arise from lower levels and, although this approach has many advantages, it can lead to "an offer in which there are initiatives that fall under competition and/or focus only on one or two types of programs" (Ibid., p199).

The limited research in the field of family literacy in most European countries has also been highlighted, with the exception of the Netherlands, the UK and Turkey.

5.1.4. Results of the studies on basic competences programs

Although there is no data on the effectiveness of the programs mentioned by the countries in the information collected by Eurydice, this issue is addressed in various studies. For example, Vorhaus et al. (2011), based in the UK, reviews the different reports of English-speaking countries on the linguistic and numerical competences of adults since 2000. This study analyzes the economic, personal, and social benefits of the programs of basic competences, the quality and effectiveness of

these programs, the number of teaching hours needed to acquire these competences, and the permanence of adults in them.

Regarding the personal and economic benefits of the programs on basic competences, the study concludes that a higher level of linguistic, numerical, and ICT competences positively impact both the personal and social development of persons. However, it also recognizes that the social and personal benefits of this training "often require time to be appreciated, and arise in ways and contexts away from formal learning environments" (ibid., p12). Likewise, the study points to the positive impact of basic competence courses on student confidence (in lost confidence in schools) and show that the acquisition of literacy and math skills during adulthood has positive effects in wages and employment.

Various aspects related to the effectiveness and quality of basic competence programs need to be considered. First of all, we must ask whether these competences should be taught in specific courses or incorporated into broader programs. Studies show that "permanence and completion rates are higher in vocational training programs that incorporate a component of linguistic and numerical competence, compared to programs where these skills are taught independently" (ibid. p13). But when it comes to training in basic competences in the workplace, research does not show a substantial improvement in the linguistic competence of short-term workers, partly due to the relatively small number of learning units taught. In any case, "those who participate in the courses of basic competences in the workplace are usually people who usually do not carry out permanent training; those who sign up for this offer actively use their linguistic skills in the workplace and in their daily lives, continuously improving them, are more likely to continue training" (ibid., p13).

One of the essential points regarding improving the effectiveness of the basic competence programs is to determine the minimum number of teaching hours students need to develop these skills significantly. According to the previous study, students benefit more from courses of at least 100 teaching hours (ibid., p13).

Another aspect to take into account when evaluating these programs is that students sign-up for different reasons, which do not always match the desire to acquire "basic competences" (ibid.). A recent study by Cedefop (2013) on key competences in workplace training reached the same conclusion. It shows that people rarely refer to the lack of "basic competences" or "key competences", but rather formulate these areas in very different terms, which probably determine

their motivation when participating in education and training. More specifically, those who participated in the Cedefop study usually highlighted their lack of formal qualifications, especially of basic education or vocational qualifications, lack of work experience, or skill for certain jobs. When they alluded to some more specific deficiencies, they tended to mention self-confidence and lack of skill for "job searching", including how to draft their curriculum vitae, submit a job application, or how to manage job interviews" (ibid., p16).

Lastly, regarding the permanence of students in these programs, studies show that participants in courses of basic competences drop out more frequently in the early stages than in the latter. Those who are in lower and/or less qualified courses also drop out more than those who sign-up for higher courses and/or have a higher qualifications. Research suggests that permanence can be favored by a regular evaluation and by the recognition of the progress made by the student, but also highlights that abandoning programs should not always be interpreted as a failure of them, but rather as a rational and positive response to changing circumstances. The key to favor the permanence of students is the possibility of having support while these interruptions in the learning process take place, either through distance or semi-present education, so they are not set back (Vorhaus et al. 2011, p14). In fact, adults who drop out of basic competence programs at specific times often retake them later. This also shows that the effectiveness of these programs should be evaluated over extended periods of time, taking into account that adults, especially those with lower literacy or other basic competences, tend to not follow a continuous and straight educational trajectory (they may have interruptions, combine several programs, repeat some of them, etc.).

5.2. Beyond the programs on basic competences: opportunities for adults to obtain a recognized degree

As mentioned in previous sections, some countries have implemented programs to facilitate the progress of adults towards other learning opportunities within the education and training system. This section focuses on the training offer for adults beyond the "basic competences", specifically programs that lead to a mid-level qualification (post-secondary, non-tertiary education).

The section is divided into three: first a summary of the opportunities of the vocational training system; then we study the mechanisms that allow adults to pursue upper secondary programs and show the percentages of people who have

achieved such qualifications as adults; and lastly we analyze the educational offer for adults, more specifically the opportunities to access higher education for non-traditional students - including adults who do not have the required access degree.

5.2.1. Opportunities to finish a mid-level qualification during adulthood

European policies place special emphasis on the importance of ensuring that all young people remain in the education and training system at least until the end of upper secondary school.

In fact, according to available statistical data, people who have completed at least upper secondary have higher employment rates than those who only have lower secondary education. Likewise, jobs that require a high school degree are usually associated with higher salaries, better working conditions and more education and training opportunities than those that demand less qualification. However, what opportunities do adults in different European countries have to achieve a high school degree? What kinds of programs are offered? What institutions participate? What percentage of the population gets a high school degree during adulthood? These are the issues addressed below.

Organizational frameworks

Although it is possible to obtain a high school degree as an adult in all European countries, the educational offer in this area varies. In many European countries (Bulgaria, Czech Republic, Estonia, Malta, Romania, Slovakia, UK, and Iceland; EACEA/Eurydice, 2011a), the education system has not developed specific programs for adults to get a compulsory secondary education degree. However, in these countries, the upper secondary level (general or professional), which leads to an official degree, can be organized flexibly, including part-time night courses, open to students who no longer have to remain in compulsory education full time.

Some countries have developed specific high school programs for adults. For example, Sweden has launched a system of “upper secondary education for adults” (*Kommunal Vuxenutbildning* (Komvux)) aimed at people over 20 years. Norway has created a similar system, for students older than 25. Senior high school programs for adults also have a long tradition in German-speaking countries: Austria has created a system of “schools for employed adults” (*Schulen für Berufstätige*) that offers at least all branches of upper secondary as night courses, and Germany has developed a system of “upper secondary education for adults” for over 19 years.

Senior high school programs for adults can also be included within the general framework of "second chance" education that encompasses various levels of the education system. This is the case of Belgium, in the system called "education for social improvement" (*enseignement de promotion sociale*). This framework encompasses programs belonging to several levels (lower secondary, upper secondary, and higher education) that lead to degrees equivalent to those of the initial education system and qualifications belonging to the adult education system. The Netherlands has a framework called VAVO (*Voortgezet algemeen volwassenenonderwijs*), with programs for adults equivalent to the different itineraries of lower and upper secondary. Luxembourg has designed a similar system, called "second qualification itinerary" (*2e voie de qualification*).

There is also an equivalent offer specifically aimed at the labor market in Belgium. This program is called "OKOT itineraries" (acronym in Dutch to refering to "itineraries that lead to a professional qualification"), which allows people over 22 years old seeking employment to take qualification courses in an educational center. The courses are focused on sectors with a shortage of skilled labor and lead to a series of degrees, from secondary education to a professional degree.

It should also be noted that several countries have developed specific programs in upper secondary education for young people who have dropped out of school at an early age. These programs often set a limit age. For example, France has launched the network of "second chance schools" (known by its abbreviation "E2C"), which offer programs for youth between 18 and 25 who left the initial education system without having obtained a degree. Similarly, Luxembourg has created a "second chance school" (*école de la 2e chance*) exclusively for young people between 16 and 24 outside the education system. Hungary also reports a program of second chances (*Masodik esély*) specifically focused on people who have prematurely abandoned their studies.

As previous Eurydice studies have shown, institutional frameworks for the offer of upper secondary education programs for adults vary across Europe (for a detailed list of them, see EACEA/Eurydice 2011a, p30-34). Figure 3.5 shows an outline of the different organizational frameworks, demonstrating that some countries only offer upper secondary programs for adults in ordinary early childhood education centers (Bulgaria, Czech Republic, Greece, Italy, Cyprus, Luxembourg, Romania, and Slovakia). However, in other countries the main providers of the offer are adult education and training centers. For example, in Belgium, adults can pursue upper

secondary education in 35 adult education centers (*Centra voor Volwassenenonderwijs*), which are non-profit entities supported by public funds.

Both models coexist in most countries, so adult students can pursue upper secondary programs both in centers that provide early education for young people and in those dedicated to adult education. However, even in those places where both systems operate, one of the two usually prevails. In Austria, for example, centers for employed adults may have different locations, but they operate primarily in early childhood education schools. In the Netherlands, adults can pursue upper secondary vocational training programs both in ordinary secondary schools and in the approximately 40 regional training centers (ROCs), where a full range of adult education programs are offered, including high school. However, in those cases where both options exist, most adults attend classes at regional training centers.

Keep in mind the differences in the institutional framework of some general education and vocational training programs. In Poland, for example, although the offer of higher-level vocational training can be developed in a large number of institutions, including vocational training centers that are also attended by young people, general adult secondary education is only provided in specific centers of general secondary education and in lifeong education centers for adults.

Get a mid-level degree during adulthood: What do the statistics reveal?

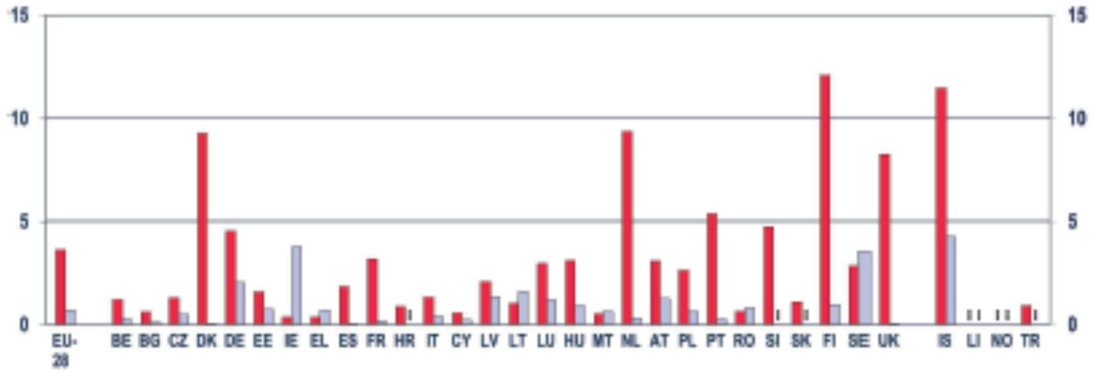
Once the offer model for adults in upper secondary school has been analyzed, the extent to which this training contributes to the volume of mid-level graduates in society as a whole is considered. The graph shown below, based on the EU Active Population Survey (EU EPA) responds in part to this question, indicating the percentage of people between 25 and 64 who got an intermediate level degree -that is, upper secondary or post-secondary non-tertiary, as adults-. Data shows that, on average, 3.6% of graduates of upper secondary education in Europe -as their maximum level of studies- have achieved this qualification as adults, so after 25 years old. However, there are considerable differences between countries.

In approximately half of European countries, the number of people who obtained a high school degree as adults does not reach 2%. This group includes countries with different educational profiles. A first group is made up of the Czech Republic, Estonia, Lithuania and Slovakia, which have a high percentage of high school graduates among their population and low drop-out rates, which means that most people reach the adulthood having finished high school. On the other hand, other

countries have relatively low numbers of graduates in upper secondary school (in particular Greece, Spain, Italy, Malta and Turkey), and some of them face serious problems of school leaving among youth.

Several countries (Germany, France, Latvia, Luxembourg, Hungary, Austria, Poland, Slovenia, and Sweden) are close to the EU average, with a percentage of between 2% and 5% of people from 25 to 64 years old who obtained a high school degree as adults. In second place is Portugal, with 5.4% of adults in the same situation. Given that Portugal is characterized by the relatively low educational level of its adult population (about 60% of adults have at most a lower secondary degree), data points to a significant contribution by the system of education and training of adults to the number of graduates in upper secondary who achieved their qualification as adults.

A few other countries are well above the European average, which means that a considerable percentage of the adult population has achieved their degree in upper secondary school after 25 years. These are Finland (12.1%), Iceland (11.4%), Denmark and the Netherlands (both 9.3%), and the UK (8.2%). Adult education profiles of these countries are slightly different: in Denmark, Finland, the Netherlands, and the UK, the percentage of adults with a low level of qualification is below the European average, while in Iceland it is slightly higher.



%	EU-28	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU
CINE 3	3.6	1.2	0.6	1.3	9.3	4.5	1.6	0.3	0.3	1.8	3.2	0.8	1.3	0.6	2.1	1.0	2.9
CINE 4	0.7	0.2	0.1	0.5	0.0	2.0	0.7	3.8	0.7	0.0	0.1	:	0.4	0.2	1.4	1.6	1.2
	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK		IS	LI	NO	TR
CINE 3	3.1	0.5	9.3	3.1	2.6	5.4	0.6	4.7	1.1	12.1	2.8	8.2		11.4	:	:	0.9
CINE 4	0.9	0.6	0.3	1.2	0.6	0.2	0.8	:	:	0.9	3.5	0.1		4.2	:	:	:

Graph: Percentage of people from 25 to 64 who achieved a mid-level degree as adults (after 25 years old) over the total adult population (25-64 years), 2013. Source: Eurostat (UE EPA).

Explanatory notes

The graph refers to those people who have achieved a medium level degree (ISCED 3 or 4) as adults, that is currently their highest level of qualification. The graph does not show situations in which people get more than one degree as adults, in particular, when they move from a middle to a higher degree (for example, finishing high school at 27 years old and higher education at 32). This explains why the EU EPA only asks for the highest degree it has and at what age it was achieved.

Although the graph analyzes the percentage of the population between 25 and 64 who have achieved a mid-level degree as adults, over the total adult population, it is also useful to quantify this percentage over the total number of medium level graduates (between 25 and 64) not over the total adult population. This gives an idea of the contribution of adult education to the volume of average graduates in different countries. The data has been broken down in the following table.

%	EU-28	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU
CINE 3	8.3	3.5	1.0	1.8	22.6	9.0	3.5	1.5	1.1	8.3	7.6	1.5	3.2	1.5	4.1	2.7	8.2
CINE 4	24.1	8.0	18.8	28.4	75.8	25.1	10.6	28.3	8.3	27.5	53.5	:	46.1	10.9	16.7	7.4	35.6
	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK		IS	LI	NO	TR
CINE 3	5.4	3.6	22.5	5.9	4.3	26.6	1.1	8.2	1.5	26.9	7.2	22.3		38.6	:	:	5.1
CINE 4	41.1	7.4	75.2	11.5	17.6	41.6	20.7	:	:	95.3	49.0	60.7		66.3	:	:	:

Percentage of people between 25 and 64 years old who have achieved a medium level degree as adults (after 25) over the total number of medium level graduates (between 25 and 64) 2013. Source: Eurostat (EPA UE).

Specific notes to countries: Bulgaria, Denmark, Spain, and Cyprus: low reliability for CINE 4.

The picture would be incomplete without if we do not mention post-secondary non-tertiary education qualifications. As the graph shows, 0.7% of adults in the EU have completed this level of education after 25 years old. This very low percentage could be due to the fact that in most European countries, post-secondary non-tertiary education qualifications aren't very frequent, so it is not usual for adults to have these types of qualifications. If we analyze the percentage of people who achieve a post-secondary non-tertiary education degree as adults compared to the total adult population, only four countries are significantly above the EU average: Germany, Ireland, Sweden, and Iceland. In these countries, between 2% and 4.2% of adults got a post-secondary non-tertiary degree as adults, it being their highest level of studies.

5.2.2. Expand horizons: opportunities for access to higher education

Entering higher education at a later stage of life is an aspiration for many adults returning to upper secondary. It can also be a goal for those who do not have the required degree to access higher education, but have acquired the necessary skills and knowledge thanks to experience. The European higher education policy (European Commission, 2011b and communications related to the Bologna Process have highlighted the importance of opening higher education to non-traditional students, including those from disadvantaged backgrounds, those that sign up in later stages (i.e. those who do not enter higher education immediately after finishing upper secondary), or adult students who do not have the ordinary degree required to access higher education.

The Eurydice Network has addressed the issue of alternative ways of accessing higher education in several of its recent studies (EACEA/Eurydice, 2011a; EACEA/Eurydice, 2011b; European Commission/EACEA/Eurydice, 2014a). They have identified the different approaches of the countries, specifically showing that, although in approximately half of European countries, finishing upper secondary education is mandatory to access higher education; the other half have more flexible access requirements. These aspects are analyzed in Chapter 4, dedicated to flexibility and access routes.

Countries that have alternative ways to enter higher education generally include recognition of both non-formal and informal learning (RVA), some have also designed preparatory programs for non-traditional candidates who wish to access this level. These programs have a double objective: to provide alternative degrees to enter higher education and also ensure that non-traditional candidates who apply to sign-up for higher education have the necessary skills to successfully achieve their learning objectives. These programs exist in France, Ireland, Sweden, UK, and Iceland.

Usually, it is higher education institutions who offer preparatory programs for non-traditional candidates, but in some countries they are also organized by other centers (for example post-compulsory education in the UK). Although there are usually no access requirements for this offer, there can be others such as age (i.e. they must be “adults”). This is applied in the program “DAEU” (*Diplôme d'Accès aux Etudes Universitaires*) in France, where candidates must be at least 20 years old, not have the ordinary degree required to access higher education (*baccalauréat*),

and have been outside the educational system for at least 2 years. It usually lasts for 1 year (300 teaching hours), and about 5000 people sign up each year.

Although equivalent programs in the UK -called "access courses"- do not set a minimum age, they are designed for adults who have been outside the education system for some time, and students are expected to be at least 19 when they begin the course. Some focus on specific areas such as "law", "nursing", or "business studies", while others provide training in a wide range of subjects. There is also a similar offer in Ireland, also called access courses. Iceland has developed the "preliminary studies" (*frumgreinanám*) program, lasting from 1 to 2 years, accepted by universities as an alternative to preparing for higher education instead of the traditional entrance exam, sometimes offered as distance education. According to Icelandic authorities, these "preliminary studies" programs have become a relatively common way to access university for adults without qualifications, with a total of 640 participants in 2011. It is also interesting to note that candidates who need educational support before joining "preliminary studies" can sign-up for a "basic program" called *menntastoðir*. Unlike the "preliminary studies" in universities, this program is taught in the 11 Lifelong Learning Centers of the country, and consists of 600 teaching hours.

The Swedish program called "basic course" (*Basår*) resembles the programs described above; it lasts one year and is aimed at students who lack the traditionally required qualifications to access some higher education programs (for example, medicine or civil engineering), but the centers that offer it (higher education institutions) generally only accept students who have completed some form of upper secondary education. Only some centers, including municipal or private institutions, admit students without a high school degree. Several countries offer preparatory courses for non-traditional candidates who wish to sign-up for higher education. This is the case in Spain, where adults who apply for a place in the university must also pass an entrance exam (except those over 40 years old with professional experience in the field of studies they wish to study). There are specific access tests for adults: over 25 and over 45. Those who wish to attend these tests can take preparatory courses in different centers, including adult, public and private education centers, and universities.

Source: Comisión Europea/EACEA/Eurydice, 2015. "La educación y formación de adultos en Europa: Ampliar el acceso a las oportunidades de aprendizaje." Eurydice report. Luxemburg: Editorial Office of the European Union.

6. CONCLUSION

This "GUIDE FOR ADAPTING ADULT EDUCATION TO THE COMMON EUROPEAN FRAMEWORK" created within the project "VIRTUAL INCLUSIVE EDUCATION FOR ADULT PEOPLE: VOLUNTEERS AND REFUGEES" has been developed with the objective of ensuring that the Intellectual Outputs and results of this project adapt to the educational needs of adult students across Europe.

Special emphasis has been placed on ensuring that both the e-learning platform and the three online training courses for adults developed within this project are adapted to the common European framework, matching programs linked to the system of initial education using the innovative training methodologies through ICTs and OERs.

In this way, the VIVAR PLATFORM: SMART EDUCATIONAL E-LEARNING PLATFORM FOR INCLUSION has been created in this project, which offers many courses to promote learning and enhance the development of the digital and critical competences.

These courses have been designed jointly by teachers and experts on the topics they deal with. We are especially proud to have had the support of the true beneficiaries to design their contents, achieving a close and accessible language while also addressing the issues they especially need and find important. For example, if you choose the COURSE FOR MIGRANTS AND REFUGEES, you'll find that expert pedagogues, adult teachers, and associations of migrants and refugees have participated in its creation, which has allowed us to create a highly impactful course to promote the inclusion of newcomers in our society and break down the barriers of hatred and racism.

Here is a detailed description of each course:

Adults

This course offers its adult users the opportunity to acquire, update, complete, or expand their knowledge and skills for their personal and professional development through formal and non-formal education. We want to offer you the possibility of developing basic training, expanding and renewing your knowledge, skills, and abilities permanently.

Thus, the purpose of the course "TRAINING BASIC SKILLS" is to improve your professional qualification and develop your personal skills and participation in social, cultural, political, and economic life. We want to offer in particular a basic learning compatible with the learning of EPAS and other official adult training centers in

Europe, which will facilitate you, once completed, to obtain official adult education certifications.

But this course will also help you develop tools for the critical analysis of your environment, and encourage you to directly participate in volunteering as a mechanism to build a more inclusive, diverse, and fair society.

This course proposes an innovative learning, not focused on memory or individual facts (like outdated education) but on the development of key competences through a virtual and personalized learning that you can conduct from home or even your smartphone. According to the European Parliament (the highest body of the European Union), through Recommendation 2006/962/EC, these competences are a combination of knowledge, skills, abilities, and attitudes appropriate to the context. This means that we do not only intend you to learn new things, but also learn how to do those things (skills) and how you face them (attitudes).

Volunteers

The course that you are going to start is intended to offer volunteers -or people who aspire to become one- the possibility to acquire, update, complete, or expand their specific knowledge and skills to work on social projects for the inclusion of migrants or refugees through formal and non-formal learning. We want to offer you the possibility of improving your capabilities of helping those who need it the most, and with that to build a fairer and equal society.

This course gathers contents and methodological strategies created through the experience of migrant persons themselves, and compiled over the years by social entities expert in the inclusion of segregated groups. Through the exchange of experiences and shared effort, we offer you a course that we believe is useful and effective to -regardless of whether you have previous experience working with migrants or not- make a difference in their and their neighbors 'lives. This course will also allow you to reinforce the "COURSE OF LITERACY FOR ADULTS", continuing the training it proposed, with specific content and examples in the field of volunteering. This course, especially aimed at local adults (native or those who are already well established in Europe), is a tool capable of advancing in the curriculum defined in European Order ECD/651/2017 of July 5th, which regulates basic education and its curriculum for adults in the field of management of the Ministries of Education, Culture, and Sports from the different European countries.

Thus, the purpose of the course "SPECIFIC TRAINING AND INCLUSION" is to improve your abilities to carry out volunteer action in a social entity, but also to help you develop tools for the critical analysis of your own environment and encourage your direct participation in volunteering as a mechanism to build a more inclusive, diverse, and fair society.

Migrants and Refugees

This course is intended to serve as a guidance tool for migrants who wish to live, work, and settle in a new society, as well as to provide support to professionals from social organizations that conduct reception and counseling tasks for foreign non-EU citizens.

The content is aimed at people who are under immigration laws, and has been made thanks to the joint work of volunteers and experts. It explains the duties and rights of both newcomers and the authorities in all areas; in general terms, it aims to contribute to the inclusion of migrants and refugees, including more specific materials on some of the areas. However, for a personalized information and advice, we recommend contacting a legal service and / or a specialized entity.

The contact data of all public entities cited throughout the guide in each area are in the last pages of each of the didactic units, plus a brief list of associations that can provide you legal advice, guidance, and other services aimed at the migrant population.

One of the more useful objectives of the course "SPECIFIC PROFESSIONAL TRAINING" is to obtain, once completed, a certificate recognized by the entities participating in the project, designed under the European Erasmus Plus Programme. This provides information on the different inclusion mechanisms, while also providing resources for the real improvement of the situation of the migrant person.